

Ontologies OF and FOR Intelligent Systems

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1. Constructing an ontology of *Intelligent System (IS)* is a nontrivial issue since its (IS) existence has not been demonstrated, and the term is used as a metaphor. It raises a number of additional questions. Not the last among them is whether existential problems can be legitimately formulated for the domain of imaginary worlds. The answer is probably an affirmative one, since imaginary worlds do exist (at least in the subsystem of planning) and thus generate corresponding ontologies. Another question is linked with processes of *reflexia* that emerge within intelligent systems. This really opens a can of worms since individual and group processes of reflection are based upon the property of self-reference – not a trivial subject for the theory of IS ontology. This set of problems is difficult but is pleasurable because it requires surveying a multicultural (at least, multidisciplinary) domain including psychological and linguistic references as well as engineering ones.

2. Constructing an ontology for *Intelligent System (IS)* is inescapable because its (IS) functioning dwells upon input, output, and intermediate (e. g. interface, etc.) ontologies. The need in multi-resolutional ontologies is looming, although the ontology community temporarily (eternally?) resists making this one of the regular issues of research. The difficulty of the latter subject is in the fact, that despite of the unity of the multi-resolutional ontology of the IS, it needs consistency checks to be conducted at each level. Nevertheless, the community seems to be well prepared for solving this issue, too.